

Appl. No. 10/675,912
Am. It. Dated: September 20, 2006
Reply to Office Action of June 20, 2006

Attorney Docket No. 81864.0025
Customer No. 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An R-T-B system rare earth permanent magnet comprising a sintered body with a composition consisting essentially of 25% to 35% by weight of R (wherein R represents one or more rare earth elements, providing that the rare earth elements include Y), 0.5% to 4.5% by weight of B, 0.02% to 0.6% by weight of Al and/or Cu, 0.03% to 0.25% by weight of Zr, 4% or less by weight (excluding O) of Co, and the balance substantially being Fe,

wherein a coefficient of variation (CV value) showing the dispersion degree of Zr in said sintered body is 130 or less and

said magnet satisfies the condition that, with regard to a residual magnetic flux density (Br) and a coercive force (HcJ), $Br + 0.1 \times HcJ$ (dimensionless) is 15.2 or greater.

2. (Original) An R-T-B system rare earth permanent magnet according to claim 1, wherein said CV value is 100 or less.

3. (Original) An R-T-B system rare earth permanent magnet according to claim 1, wherein said CV value is 90 or less.

4. (Original) An R-T-B system rare earth permanent magnet according to claim 1, wherein the content of Zr in said sintered body is between 0.05% and 0.2% by weight.

5. (Original) An R-T-B system rare earth permanent magnet according to claim 1, wherein the content of Zr in said sintered body is 0.1% to 0.15% by weight.

6. (Original) An R-T-B system rare earth permanent magnet according to claim 1, wherein the amount of oxygen contained in said sintered body is 2,000 ppm or less.

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7. (Cancelled)

8. (Currently amended) A compound for magnet, which is used in the manufacture of an R-T-B system rare earth permanent magnet comprising a main phase consisting of an $R_2T_{14}B_1$ phase (wherein R represents one or more rare earth elements (providing that the rare earth elements include Y), and T represents at least one transition metal element containing, as a main constituent, Fe, or Fe and Co), and a grain boundary phase containing a higher amount of R than said main phase,

said compound for magnet having a composition consisting essentially of 25% to 35% by weight of R, 0.5% to 4.5 % by weight of B, 0.02% to 0.6% by weight of Al and/or Cu, 0.03% to 0.2% by weight of Zr, 4% or less by weight (excluding O) of Co, and the balance substantially being Fe,

wherein the suitable sintering temperature range, where said R-T-B system rare earth permanent magnet obtained by sintering has a squareness (H_k/H_{cJ}) of 90% or greater, is 40°C or more and said compound for magnet comprises a mixture of an alloy for formation of said main phase and an alloy for formation of said grain boundary phase, wherein Zr and Cu is contained in said alloy for formation of said main phase.

9. (Original) A compound for magnet according to claim 8, wherein said suitable sintering temperature range is 60°C or more.

10. (Canceled)

11. (Currently amended) A compound for magnet according to claim 8, ~~comprising a mixture of an alloy for formation of said main phase and an alloy for formation of said grain boundary phase, wherein Zr, Cu and Al are~~ is contained in said alloy for formation of said main phase.